UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III



Environmental Sciences Center 701 Mapes Road Fort Meade, Maryland 20755-5350

DATE:

February 24, 2012

SUBJECT:

Region III Data QA Review

FROM:

Colleen Walling

Region III ESAT RPO (3EA20)

TO:

Rich Fetzer

Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (DAS:# R33917; SDG: #480-16100-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0042

TDF: 02100 Data Validation

TO: #0042

TDF: #02085 Sample log-in processing

cc: Gene Nance (Techlaw) Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

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Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350

Ex. 4 - CBI

Date:

February 23, 2012

Subject:

Organic Data Validation (M3 Level)

Case: R33917

Project: 480-16100-1

Site: Dimock

From:

Ex. 4 - CBI

Senior Data Reviewer

Ex. 4 - CBI

Senior Oversight Chemist

To:

Colleen Walling

ESAT Region 3 Project Officer

OVERVIEW

Third party Case R33917, Project 480-16100-1, consisted of twenty (20) aqueous samples including three (3) field blanks analyzed for ethylene glycol. Samples were analyzed by TestAmerica Buffalo (TAL BUF) according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage 4 Validation Manual). Areas of concern with respect to data usability are listed below.

MINOR PROBLEM

• The laboratory employed a four (4) point calibration curve for the analysis of the compounds requested; however, Method 8015B specifies the use of a five (5) point curve. No action was taken by the reviewer based on this deviation from the method.

NOTES

- Reported recoveries and Relative Percent Differences (RPDs) in Laboratory Control Sample (LCS) analyses and Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample HW44 were within control limits.
- The calibration factors calculated by the reviewer were slightly different than those calculated by the laboratory. Results calculated using these calibration factors were within rounding errors from laboratory and data validation results.

ATTACHMENTS

Appendix A – Glossary of Data Qualifier Codes

Appendix B – Data Summary Form(s)

Appendix C – Chain of Custody Records

Appendix D – Laboratory Case Narrative

DCN: R33917_480-16100-1

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

- B = Not detected substantially above the level reported in laboratory or field blanks.
- R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
- N = Tentative identification. Consider present.
 Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

- J = Analyte present. Reported value may not be accurate or precise.
- K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.
- UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

DIM0272047 DIM0272050

DATA SUMMARY FORM: Glycols

Page _1__ of __1_

CASE: R33917

PROJECT #: 480-16100-1

DIMOCK

Site: Lab.: **TALBUF** Number of Soil Samples: 0

Number of Water Samples: 20

Ethylene glycol	10					
Slycols	RL	Result Flag				
Dilution Factor :		1.0	1.0	1.0	1.0	1.0
Time Sampled :		13:35	09:00	13:36	10:53	10:53
Date Sampled :		2/07/2012	2/08/2012	2/09/2012	2/09/2012	2/09/2012
Units:		mg/L	mg/L	mg/L	mg/L	mg/L
Matrix:		Water	Water	Water	Water	Water
Field QC:		Field Blank	Field Blank	Field Blank		
Laboratory ID:		480-16100-1	480-16100-2	480-16100-3	480-16100-4	480-16100-5
Sampling Location :		FB12	FB13	FB14	HW21	HW21
Sample Number :		FB12	FB13	FB14	HW21	HW21Z

Sample Number :		HW22	HW22-P	HW23	HW23-P	HW38
Sampling Location :		HW22	HW22-P	HW23	HW23-P	HW38
Laboratory ID:		480-16100-6	480-16100-7	480-16100-8	480-16100-9	480-16100-10
Field QC:						
Matrix :		Water	Water	Water	Water	Water
Units:		mg/L	mg/L	mg/L	mg/L	mg/L
Date Sampled :		2/09/2012	2/09/2012	2/08/2012	2/08/2012	2/08/2012
Time Sampled :		10:42	10:50	15:42	15:39	10:41
Dilution Factor :		1.0	1.0	1.0	1.0 🖽	1.0
Glycols	RL	Result Flag	Result Flag	Result Flag	Result Flag	Flag
Ethylene glycol	10					

Sample Number :		HW38-P	HW44	HW47	HW47-P	HW48
Sampling Location :		HW38-P	HW44	HW47	HW47-P	HW48
Laboratory ID:		480-16100-11	480-16100-12	480-16100-13	480-16100-14	480-16100-15
Field QC:		e e	893			
Matrix:		Water	Water	Water	Water	Water
Units:		mg/L	mg/L	mg/L	mg/L	mg/L
Date Sampled :		2/08/2012	2/09/2012	2/08/2012	2/08/2012	2/08/2012
Time Sampled :		10:52	14:49	11:50	12:25	16:06
Dilution Factor:		1.0	1.0	1.0	1.0	1.0
Glycols	RL	Result Fla	g Result Flag	Result Flag	Result Flag	Result Flag
Ethylene glycol	10					2.0

Sample Number :		HW48Z	***************************************	HW49	***************************************	HW49-P		HW51		HW51-P	
Sampling Location :		HW48		HW49		HW49-P		HW51		HW51-P	
Laboratory ID:		480-16100	-16	480-16100-	17	480-16100-1	8	480-16100)-19	480-16100	-20
Field QC:											
Matrix :		Water	!	Water		Water		Water		Water	
Units:		mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :		2/08/2012		2/09/2012		2/09/2011		2/07/2012		2/07/2012	
Time Sampled :	Time Sampled :			14:11		14:26		13:48		13:56	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Glycols	RL	Result	Flag	Result	Flag	Result F	lag	Result	Flag	Result	Flag
Ethylene glycol	10										

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Revised 09/99

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USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/13/2012 CarrierName: FedEx AirbillNo: 7980 5367 6448

CHAIN OF CUSTODY RECORD

Project Code: TL01-11-12-001

No: 3-021012-100338-0184

Lab: Test America DIM

Lab Contact:

Lab Phone: 716.504.9822

Sample #	Matrix/Sampler	Coll. Method	Analysis/Tumaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW23	Drinking Water/ Tom Sedlacek	Grab	EthyGlycol(7), EthyGlycol(7)	4450 (-NA- / 40mlGlassVial), 4451 (-NA- / 40mlGlassVial) (2)	HW23	02/08/2012 15:42	:
HW23-P	Drinking Water/ Dan Jacobsen	Grab	EthyGlycol(7), EthyGlycol(7)	4476 (-NA- / 40miGiassVial), 4477 (-NA- / 40miGiassVial) (2)	HW23-P	02/08/2012 15:39	
HW38	Drinking Water/ Tom Sedlacek	Grab	EthyGlycol(7), EthyGlycol(7)	4287 (-NA- / 40mlGlassVial), 4288 (-NA- / 40mlGlassVial) (2)	HW38	02/08/2012 10:41	
HW38-P	Drinking Water/ Dan Jacobsen	Grab	EthyGlycol(7), EthyGlycol(7)	4321 (-NA- / 40miGlassVial), 4322 (-NA- / 40miGlassVial) (2)	HW38-P	02/08/2012 10:52	
HW44	Drinking Water/ Bryan Berna	Grab	EthyGlycol(7), EthyGlycol(7), EthyGlycol(7), EthyGlycol(7)	4828 (-NA- / 40mlGlassVial), 4829 (-NA- / 40mlGlassVial), 4843 (-NA- / 40mlGlassVial), 4844 (-NA- / 40mlGlassVial) (4)	HW44	02/09/2012 14:49	
HW47	Drinking Water/ David Johnson	Grab	EthyGlycol(7), EthyGlycol(7)	4356 (-NA- / 40mlGlassVial), 4357 (-NA- / 40mlGlassVial) (2)	HW47	02/08/2012 11:50	
HW47-P	Drinking Water/ Francisco Lapostol	Grab	EthyGlycol(7), EthyGlycol(7)	4390 (-NA- / 40mlGlassVial), 4391 (-NA- / 40mlGlassVial) (2)	HW47-P	02/08/2012 12:25	

	Shipment for Case Complete? N
Sample(s) to be used for Lab QC: HW44	Samples Transferred From Chain of Custody #
Analysis Key: EthyGlycol=17-Ethylene Glycol	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
7	Dulkey	_	alt	Zhuhz	(015						
						·					
										i i	

DIM0272052

Page 3 of 3

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/13/2012 CarrierName: FedEx AirbillNo: 7980 5367 6448 **CHAIN OF CUSTODY RECORD**

Project Code: TL01-11-12-001

No: 3-021012-100338-0184

Lab: Test America DIM

Lab Contact:

Lab Phone: 716.504.9822

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW48	Drinking Water/ David Johnson	Grab	EthyGlycol(7), EthyGlycol(7)	4510 (-NA- / 40mtGlassVial), 4511 (-NA- / 40mtGlassVial) (2)	HW48	02/08/2012 16:06	
HVV48z	Drinking Water/ David Johnson	Grab	EthyGlycol(7), EthyGlycol(7)	4544 (-NA- / 40mlGlassVial), 4545 (-NA- / 40mlGlassVial) (2)	HW48	02/08/2012 16:06	
HW49	Drinking Water/ David Johnson	Grab	EthyGlycol(7), EthyGlycol(7)	4734 (-NA- / 40mlGlassVial), 4735 (-NA- / 40mlGlassVial) (2)	HW49	02/09/2012 14:11	
HW49-P	Drinking Water/ Francisco Lapostol	Grab	EthyGlycol(7), EthyGlycol(7)	4760 (-NA- / 40mlGlassVial), 4761 (-NA- / 40mlGlassVial) (2)	HW49-P	02/09/2012 14:26	
HW51	Drinking Water/ David Johnson	Grab	EthyGlycol(7), EthyGlycol(7)	4117 (-NA- / 40mlGlassVial), 4118 (-NA- / 40mlGlassVial) (2)	HW51	02/07/2012 13:48	
HW51-P	Drinking Water/ Francisco Lapostol	Grab	EthyGlycol(7), EthyGlycol(7)	4153 (-NA- / 40mlGlassVial), 4154 (-NA- / 40mlGlassVial) (2)	HW51-P	02/07/2012 13:56	

э	Shipment for Case Complete? N
Special Instructions:	Samples Transferred From Chain of Custody #
Analysis Key: EthyGlycol=17-Ethylene Glycol	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
6	Dellely	7/3/1	2 Cell	2/14/12	1015						ē.
			:			4					

02/21/2012



ANALYTICAL REPORT

Job Number: 480-16100-1

Job Description: TechLaw Project No. R33917 (EG only)

For:

Techlaw, Inc 2208 Warwood Ave. Wheeling, WV 26003-6546

Attention: Mr. Gene Nance

Approved for release Brian Fischer Project Manager II 2/21/2012 11:49 AM

Brian Fischer
Project Manager II
brian.fischer@testamericainc.com
02/21/2012

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298 Tel (716) 691-2600 Fax (716) 691-7991 <u>www.testamericainc.com</u>



Lab Name: TestAmerica Buffalo	Job No.:	: 480-16100-1			
SDG No.:					
Instrument ID: PE-01	Analys	Analysis Batch Number: 49964			
Lab Sample ID: STD 480-49964/6 IC	Client	Client Sample ID:			
Date Analyzed: 02/01/12 11:32	Lab File ID:	e ID: PE08206.d	GC Column:	1: ZB-5	ID: 0.25 (mm)
COMPOUND NAME	RETENTION	MANUAL INTE	INTEGRATION		
	TIME	REASON	ANALYST	DATE	
2-Ethoxyethanol	2.08	Peak Tail	dosierc	02/01/12 13:24	
Lab Sample ID: STD 480-49964/7 IC	Client	Client Sample ID:		.ž	;
Date Analyzed: 02/01/12 11:49	Lab File	e ID: PE08207.d	GC Column:	1: ZB-5	ID: 0.25(mm)
COMPOUND NAME	RETENTION	MANUAL INTE	INTEGRATION		
	TIME	REASON	ANALYST	DATE	
2-Ethoxyethanol	2.07	Peak Tail	dosierc	02/01/12 13:25	
Lab Sample ID: STD 480-49964/8 IC	Client	Client Sample ID:			
Date Analyzed: 02/01/12 12:06	Lab File ID:	le ID: PE08208.d	GC Column:	1: 28-5	ID: 0.25(mm)
COMPOUND NAME	RETENTION	MANUAL INTEGRATION	SGRATION	TO THE THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRES	
	TIME	REASON	ANALYST	DATE	
2-Methoxyethanol	1.91	Incomplete Integration	dosierc	02/01/12 13:27	
2-Ethoxyethanol	2.07	Peak Tail	dosierc	02/01/12 13:27	

METHOD SUMMARY

Client: Techlaw, Inc

Job Number: 480-16100-1

Description	Lab Location	Method	Preparation Method
Matrix Water	***************************************		
Glycols -Direct Injection (GC/FID)	TAL BUF	SW846 8015B	
8015 Direct Injection Prep (Aqueous)	TAL BUF		SW846 8015 Prep

Lab References:

TAL BUF = TestAmerica Buffalo

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

ATTACHMENT 2

DIM0272047 DIM0272057

Appendix A

Form Is

DIM0272047 DIM0272058

Lab Name: I	estAmerica Buffalo	Job No.: 480-16100-1				
SDG No.:						
Client Sampl	le ID: FB12	Lab Sample ID: 480-16100-1				
Matrix: Wat	er	Lab File ID: PE09186.d				
Analysis Method: 8015B Date Collected: 02/07/2012 13:						
Sample wt/vo	ol: 0.5(mL)	Date Analyzed: 02/15/2012 11:00				
Soil Aliquot	Vol:	Dilution Factor: 1				
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)				
% Moisture:		Level: (low/med) Low				
Analysis Bat	ch No.: 51671	Units: mg/L				
CAS NO.	COMPOUND NAME	RESULT Q RL MDL				
107-21-1	Ethylene glycol	ND 10 0.76				
CAS NO.	SURROGATE	%REC Q LIMITS				
110-63-4	1,4-Butanediol	108 66-130				

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 SDG No.: Lab Sample ID: 480-16100-2 Client Sample ID: FB13 Matrix: Water Lab File ID: PE09187.d Date Collected: 02/08/2012 09:00 Analysis Method: 8015B Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:17 Soil Aliquot Vol: Dilution Factor: 1 GC Column: ZB-5 Soil Extract Vol.: ID: 0.25(mm) Level: (low/med) Low % Moisture: Analysis Batch No.: 51671 Units: mg/L COMPOUND NAME RESULT RLCAS NO. Q MDL 107-21-1 Ethylene glycol 10 0.76

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1.4-Butanediol	104		66-130

Lab Name: To	estAmerica Buffalo	Job	No.: 480-16		ng nghaliphaliphahang iyo ku manggalibaliphahayaad 1790/21 Philibaliya	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SDG No.:				,		i
Client Sampl	e ID: FB14	Lab	Sample ID:	480-1610	0-3	
Matrix: Wate	er	Lab	File ID: PE	09188.d		
Analysis Met	hod: 8015B	Dat	e Collected:	02/09/2	012 13:3	6
Sample wt/vo	1: 0.5(mL)	Dat	e Analyzed:	02/15/20	12 11:34	
Soil Aliquot	Vol:	Dil	ution Factor:	1		
Soil Extract	Vol.: ,	GC	Column: ZB-5	I	ID:	0.25(mm)
% Moisture:		Lev	el: (low/med)	Low		
Analysis Bat	ch No.: 51671	Uni	ts: mg/L			d-al-l-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
CAS NO.	COMPOUND NAME		RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	~1.5.W.(0)10.30.40.(1)0.60.00.00.	ND	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10	0.76
CAS NO.	SURROGATE			%REC	. Q	LIMITS

110-63-4

1,4-Butanediol

Lab Name: T	estAmerica Buffalo	Job No.: 480-16100-1				
SDG No.:						
Client Sampl	e ID: HW21	Lab Sample ID: 480-16100-4				
Matrix: Wat	er	Lab File ID: PE09189.d				
Analysis Met	hod: 8015B	Date Collected: 02/09/2012 10:53				
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:52						
Soil Aliquot	: Vol:	Dilution Factor: 1				
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)				
% Moisture:		Level: (low/med) Low				
Analysis Bat	ch No.: 51671	Units: mg/L				
CAS NO.	COMPOUND NAME	RESULT Q RL MDL				
107-21-1	Ethylene glycol	ND 10 0.76				
CAS NO.	SURROGATE	%REC Q LIMITS				
110-63-4	1,4-Butanediol	100 66-130				

Lab Name: T	estAmerica Buffalo	Job	No.: 480-1	6100-1		
SDG No.:						
Client Sampl	e ID: HW21Z	Lab	Sample ID:	480-1610	0-5	
Matrix: Wate	er .	Lab	File ID: P	E09190.d		
Analysis Met	hod: 8015B	Dat	e Collected:	02/09/2	012 10:53	
Sample wt/vo	ol: 0.5(mL)	Dat	e Analyzed:	02/15/20	12 12:09	
Soil Aliquot	. Vol:	Dil	ution Factor	: 1	and and a state of the state of	
Soil Extract	Vol.:	GC	Column: ZB-	5	ID: 0	.25(mm)
% Moisture:		Lev	el: (low/med) Low		
Analysis Bat	ch No.: 51671	Uni	ts: mg/L			5774 1745 (Salan 2887 - 2887 a 1788 a 1874 (Salan 287 a 1844 (Salan 287 a 1848 (Salan 287 a 1878 (Salan 287 a
CAS NO.	COMPOUND NAME		RESULT	Q	RL	MDL
107-21-1	Ethylene glycol		ND		10	0.76
CAS NO.	SURROGATE			%REC	Q	LIMITS

110-63-4

1,4-Butanediol

Lab Name: 1	estAmerica Buffalo	Job No.: 480-16100-1
SDG No.:		
Client Samp	le ID: HW22	Lab Sample ID: 480-16100-6
Matrix: Wat		Lab File ID: PE09191.d
Analysis Me	thod: 8015B	Date Collected: 02/09/2012 10:42
Sample wt/vo		Date Analyzed: 02/15/2012 12:26
Soil Aliquo	t Vol:	Dilution Factor: 1
Soil Extract	t Vol.:	GC Column: ZB-5 ID: 0.25(mm)
% Moisture:		Level: (low/med) Low
Analysis Bat	sch No.: 51671	Units: mg/L
CAS NO.	COMPOUND NAME	RESULT Q RL MDL
107-21-1	Ethylene glycol	ND 10 0.7
CAS NO.	SURROGATE	%REC Q LIMITS
110-63-4	1.4-But anediol	103 66-130

Lab Name: 1	estAmerica Buffalo	Job No.: 480-16	5100-1		
SDG No.:		A STANDARD AND AND AND AND AND AND AND AND AND AN			
Client Sampl	Le ID: HW22-P	Lab Sample ID:	480-1610	0-7	
Matrix: Wat	er	Lab File ID: P	E09192.d		HANGET HANGE HANGE HELD BEINGER EIN PERMINNE
Analysis Met	thod: 8015B	Date Collected:	02/09/2	012 10:50	
Sample wt/vo	ol: 0.5(mL)	Date Analyzed:	02/15/20	12 12:43	
Soil Aliquot	Vol:	Dilution Factor	: 1	·1	
Soil Extract		GC Column: ZB-5	5	ID: 0	.25(mm)
% Moisture:		Level: (low/med	Low_	naar kan laati saaniibaahaad ah dhalbh dhalbh diribh in 1997 790 1897 - 1777 a	· · · · · · · · · · · · · · · · · · ·
Analysis Bat	ch No.: 51671	Units: mg/L			
					· .
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
			1		
CAS NO.	SURROGATE		%REC	Q	LIMITS
110-63-4	1,4-Butanediol		10	8	66-130

Lab Name: 7	TestAmerica Buffalo	Job No.: 480-16100-1					
SDG No.:							
Client Samp	le ID: HW23	Lab	Sample ID:	480-1610	0-8		
Matrix: Wat	er	Lab	File ID: P	E09193.d	non-base according of the orthogonal property and the orth		
Analysis Me	thod: 8015B	Date Collected: 02/08/2012 15:42					
Sample wt/vo	ol: 0.5(mL)	Date Analyzed: 02/15/2012 13:01					
Soil Aliquot	Soil Aliquot Vol:		Dilution Factor: 1				
Soil Extract	t Vol.:	GC	Column: ZB-	5	ID: 0).25(mm)	
% Moisture:		Lev	el: (low/med) Low			
Analysis Bat	cch No.: 51671	Uni	ts: mg/L				
CAS NO.	COMPOUND NAME		RESULT	Q	RL	MDL	
107-21-1	Ethylene glycol		ND		10	0.76	
CAS NO.	SURROGATE		Manada wila de 1930 (E. et 1931 (E. P. E. P. E. P. E. P. E.	%REC	Q	LIMITS	

110-63-4

1,4-Butanediol

66-130

Lab Name: 1	TestAmerica Buffalo	Job No.: 480-16100-1				
SDG No.:						
Client Samp	le ID: HW23-P	Lab Sample ID:	480-161	00-9		
Matrix: Wat	.er	Lab File ID: P	E09195.d			
Analysis Me	nod: 8015B Date Collected: 02/08/2012 15:39					
Sample wt/vol: 0.5(mL)		Date Analyzed: 02/15/2012 13:35				
Soil Aliquo	t Vol:	Dilution Factor	: 1			
Soil Extract Vol.:		GC Column: ZB-5 ID: 0.25(mm)				
% Moisture:		Level: (low/med) Low			
Analysis Bat	tch No.: 51671	Units: mg/L	·		ndri E. Gibbles amel skulde med desse som manda andrible er udeb or udf di	
CAS NO.	COMPOUND NAME	RESULT	Q	RL .	MDL	
107-21-1	Ethylene glycol	ND		10	0.76	
CAS NO.	SURROGATE		%REC	Q	LIMITS	
110-63-4	1.4-Butanediol	and large I the delice -	1	10	66-130	

Lab Name: To	estAmerica Buffalo	Job No.: 480-16100-1				
SDG No.:	*					
Client Sampl	e ID: HW38	Lab Sample ID: 480-16100-10				
Matrix: Wate	er	Lab File ID: PE09196.d				
Analysis Method: 8015B		Date Collected: 02/08/2012 10:41				
Sample wt/vol: 0.5(mL)		Date Analyzed: 02/15/2012 13:53				
Soil Aliquot Vol:		Dilution Factor: 1				
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)				
% Moisture:	·	Level: (low/med) Low				
Analysis Bat	ch No.: 51671	Units: mg/L				
CAS NO.	COMPOUND NAME	RESULT Q RL MDL				
107-21-1	Ethylene glycol	ND 10 0.76				

%REC

105

Q

LIMITS

66-130

SURROGATE

CAS NO.

1,4-Butanediol

110-63-4

Lab Name:	PestAmerica Buffalo	Job No.: 480-1	6100-1		
SDG No.:					
Client Samp	le ID: HW38-P	Lab Sample ID:		00-11	
Matrix: Wat	er	Lab File ID: F	E09197.d		
Analysis Me	thod: 8015B	Date Collected: 02/08/2012 10:52			
Sample wt/vo	ol: 0.5(mL)	Date Analyzed:	02/15/20)12 14:10	
Soil Aliquo	t Vol:	Dilution Factor	: 1	,	,
Soil Extract	t Vol.:	GC Column: ZB-	5	ID: 0	.25 (mm)
% Moisture:		Level: (low/med	d) Low		
Analysis Bat	cch No.: 51671	Units: mg/L		han (1)) ((() () (() () () () ()	
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
CAS NO.	SURROGATE	:	%REC	Q	LIMITS
110-63-4	1,4-Butanediol		10	18	66-130

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 SDG No.: Client Sample ID: HW44 Lab Sample ID: 480-16100-12 Lab File ID: PE09198.d Matrix: Water Date Collected: 02/09/2012 14:49 Analysis Method: 8015B Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 14:27 Soil Aliquot Vol: Dilution Factor: 1 Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm) % Moisture: Level: (low/med) Low Analysis Batch No.: 51671 Units: mg/L RESULT CAS NO. COMPOUND NAME Q RL MDL 10 107-21-1 Ethylene glycol ND 0.76

SURROGATE

%REC

103

Q

LIMITS

66-130

CAS NO.

1,4-Butanediol

110-63-4

Lab Name: T	estAmerica Buffalo	Job No.: , 480-16100-1				
SDG No.:			~~~			
Client Sampl	e ID: HW47	Lab Sample ID: 480-16100-13				
Matrix: Wat	er	Lab File ID: PE09201.d				
Analysis Met		Date Collected: 02/08/2012 11:50				
Sample wt/vol: 0.5(mL)		Date Analyzed: 02/15/2012 15:19				
Soil Aliquot Vol:		Dilution Factor: 1				
Soil Extract Vol.:		GC Column: ZB-5 ID: 0.25(mm)				
% Moisture:		Level: (low/med) Low				
Analysis Bat	ch No.: 51671	Units: mg/L	v			
CAS NO.	COMPOUND NAME	RESULT Q RL ME)Ļ			
107-21-1	Ethylene glycol	ND 10	0.76			
CAS NO.	SURROGATE	. %REC Q LIMI	TS			

109

66-130

110-63-4

1,4-Butanediol

Lab Name: 1	TestAmerica Buffalo	Job No.: 480-1	6100-1		
SDG No.:					
Client Samp	le ID: HW47-P	Lab Sample ID:	480-16100	-14	
Matrix: Wat	er	Lab File ID: P	E09202.d		
Analysis Met	thod: 8015B	Date Collected:	02/08/20	12 12:25	
Sample wt/vo	ol: 0.5(mL)	Date Analyzed:	02/15/201	2 15:36	
Soil Aliquot	t Vol:	Dilution Factor	: 1		
Soil Extract	t Vol.:	GC Column: ZB-	5	ID: 0	.25 (mm)
% Moisture:		Level: (low/med) Low		
Analysis Bat	cch No.: 51671	Units: mg/L			
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
CAS NO.	SURROGATE	The state of the s	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	manuscration (a 1 EVER dull d = 11) FT	106		66-130

Lab Name: T	estAmerica Buffalo	Job No.: 480-16	5100-1							
SDG No.:		ALAJO NY.								
Client Sampl	e ID: HW48	Lab Sample ID:								
Matrix: Wat	er	Lab File ID: PE09203.d Date Collected: 02/08/2012 16:06 Date Analyzed: 02/15/2012 15:54 Dilution Factor: 1								
Analysis Met	hod: 8015B									
Sample wt/vo	1: 0.5(mL)									
Soil Aliquot	Vol:									
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)								
% Moisture:		Level: (low/med) Low		man and a state that are an interpretation of the state o					
Analysis Bat	ch No.: 51671	Units: mg/L	малан каланаа балана кадама без ка са балуу күчкө к							
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL					
107-21-1	Ethylene glycol	ND		10	0.76					
	46388947									
CAS NO.	SURROGATE		%REC	Q	LIMITS					

110

66-130

110-63-4

1,4-Butanediol

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 SDG No.: Client Sample ID: HW48Z Lab Sample ID: 480-16100-16 Matrix: Water Lab File ID: PE09204.d Analysis Method: 68015B Date Collected: 02/08/2012 16:06 Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 16:11 Soil Aliquot Vol: Dilution Factor: 1 Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm) Level: (low/med) Low % Moisture: Analysis Batch No.: 51671 Units: mg/L RESULT CAS NO. COMPOUND NAME MDL RL 107-21-1 Ethylene glycol ND 0.76

&REC

105

SURROGATE

FORM I 8015B

CAS NO.

1,4-Butanediol

110-63-4

LIMITS

66-130

Lab Name: Te	estAmerica Buffalo	Job No.: 480-16100-1
SDG No.:		
Client Sample	e ID: HW49	Lab Sample ID: 480-16100-17
Matrix: Wate	r	Lab File ID: PE09206.d
Analysis Meth	nod: 8015B	Date Collected: 02/09/2012 14:11
Sample wt/vol	l: 0.5(mL)	Date Analyzed: 02/15/2012 16:46
Soil Aliquot	Vol:	Dilution Factor: 1
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)
% Moisture:		Level: (low/med) Low
Analysis Bato	ch No.: 51671	Units: mg/L
CAS NO.	COMPOUND NAME	RESULT Q RL MDL
107-21-1	Ethylene glycol	ND 10 0.76
CAS NO.	SURROGATE	%REC Q LIMITS

106

66-130

110-63-4

1,4-Butanediol

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 SDG No.: Client Sample ID: HW49-P Lab Sample ID: 480-16100-18 Matrix: Water Lab File ID: PE09207.d Analysis Method: 8015B Date Collected: 02/09/2012 14:26 Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 17:03 Soil Aliquot Vol: Dilution Factor: 1 Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm) % Moisture: Level: (low/med) Low Analysis Batch No.: 51671 Units: mg/L CAS NO. COMPOUND NAME RESULT RL · Q MDL 107-21-1 Ethylene glycol 10 0.76 ND

SURROGATE

%REC

106

0

LIMITS

66-130

CAS NO.

110-63-4

1,4-Butanediol

Lab Name:	restAmerica Buffalo	Job No.: 480-16	5100-1	-dd)-de-8de-2d	
SDG No.:	100000000000000000000000000000000000000				
Client Samp	le ID: HW51	Lab Sample ID:	480-16100	-19	
Matrix: Wat	er .	Lab File ID: P	E09227.d		
Analysis Me	thod: 8015B	Date Collected:	02/07/20	12 13:48	
Sample wt/v	ol: .5(mL)	Date Analyzed:	02/17/201	2 09:59	
Soil Aliquo	t Vol:	Dilution Factor	: 1		
Soil Extract	t Vol.:	GC Column: ZB-5	5	ID: 0	.25 (mm)
% Moisture:		Level: (low/med) Low		
Analysis Bat	tch No.: 51962	Units: mg/L		and and a supplementary of the	$p_{ij} = p_{ij} = p$
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND	(Projection of the Projection	10	0.76
ſ			ALCO - BURN BRENDERS		
CAS NO.	SURROGATE		%REC	Q	LIMITS
110 62 4	2 4 70-6	be a side of the state of the s	100	T	66 120

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 SDG No.: Client Sample ID: HW51-P Lab Sample ID: 480-16100-20 Matrix: Water Lab File ID: PE09228.d Analysis Method: 8015B Date Collected: 02/07/2012 13:56 Sample wt/vol: .5(mL) Date Analyzed: 02/17/2012 10:17 Dilution Factor: 1 Soil Aliquot Vol: GC Column: ZB-5 ID: 0.25(mm) Soil Extract Vol.: Level: (low/med) Low % Moisture: Analysis Batch No.: 51962 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	109		66-130

Appendix B

Support Documentation

DIM0272047 DIM0272079

FORM VI GC VOA INITIAL CALIBRATION DATA EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo	Job No.: 480-16100-1	Analy Batch No.: 49964
SDG No.:		
Instrument ID: PE-01	GC Column: ZB-5 ID: 0.25(mm)	Heated Purge: (Y/N) N
Calibration Start Date: 02/01/2012 10:57	8	Calibration ID: 5852

Calibration Files:

LEVEL:		LAB SAMPLE ID:	LAB FILE ID:
Level	1	STD 480-49964/5	PE08205.d
Level	2	STD 480-49964/6	PE08206.d
Level	3	STD 480-49964/7	PE08207.d
Level	4	STD 480-49964/8	PE08208.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4				RT WINDOW	AVG RT
2-Methoxyethanol	1.904	1.920	1.912	1.907		1	***************************************	1.870 - 1.970	1.911
2-Ethoxyethanol	2.067	2.083	2.073	2.068				2.033 - 2.133	2.073
Propylene glycol	4.515	4.524	4.519	4.523				4.474 - 4.574	4.520
Ethylene glycol	4.771	4.780	4.773	4.779				4.730 - 4.830	4.776
2,2'-Oxybisethanol	7.180	7.188	7.179	7.187				7.138 - 7.238	7.184
Triethylene Glycol	8.828	8.833	8.827	8.833				8.783 - 8.883	8.830
1,4-Butanediol	6.829	6.839	6.831	6.837	ļ:			6.789 - 6.889	6.834

FORM VI GC VOA INITIAL CALIBRATION DATA EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica B	ıffalo		80-16100-1		Analy Batch No.: 49964
SDG No.:		manganti i Malaiti i Marawata Minina waka manana manaka ka mana manaka ka ma	-14.91.5	NOTICE A 11 Aut MANU Sale halaman and adalaman adalaman and adalaman and adalaman adalaman adalaman adalaman adalaman adalaman adalaman	
Instrument ID: PE-01		GC Column:	ZB-5	ID: 0.25(mm)	Heated Purge: (Y/N) N
Calibration Start Date:				02/01/2012 12:06	Calibration ID: 5852

Calibration Files:

	LEVEL:		LAB	SAMPLE ID:	LAB FILE ID:
-	Level	1	STD	480-49964/5	PE08205.d
200	Level	2	STD	480-49964/6	PE08206.d
-	Level	3	STD	480-49964/7	PE08207.d
į	Level	4	STD	480-49964/8	PE08208.d

ANALYTE ·		CF			CURVE		COEFFICIENT		#	MIN CF	%RSD	#	MAX	R^2	#	MIN R^2
	LVL 1	LVL 2	LVL 3	LVL 4	TYPE	В	М1	M2					%RSD	OR COD		OR COD
2-Methoxyethanol	563452	596737	595761	513714	Ave	***********	571859.509		T		6.2	TTT	20.0	and the second	T	
2-Ethoxyethanol	751570	792686	787469	694526	Ave		760510.780		1		5.3		20.0	THE STATE OF THE S		1 1
Propylene glycol	617951	671784	682739	601502	Ave		643217.933		1	30.0	5.4	1	20.0			Water all a contract to the co
Ethylene glycol	459250	498692	513964	454783	Ave		480568.287				5.3		20.0			
2,2'-Oxybisethanol	548106	538716	560304	500903	Ave		540870.511	***************************************			4.4		20.0		T	
Triethylene Glycol	362706	305218	329041	307007	Ave		350933.990	Wadanis and a second			17.0		20.0			
1,4-Butanediol	913252	977122	967058	853325	Ave		917742.130				5.9	1	20.0	1211		

FORM VI GC VOA INITIAL CALIBRATION DATA EXTERNAL STANDARD RESPONSE AND CONCENTRATION

	stAmerica Buffalo		480-16100-1		Analy Batch No.:	
SDG No.:						
Instrument ID	: PE-01	GC Column	ZB-5	, ,		//N) N

Calibration End Date: 02/01/2012 12:06

Calibration Files:

LEVEL:		LAB	SAMPLE ID:	LAB FILE ID:
Level	1	STD	480-49964/5	PE08205.d
Level	2	STD	480-49964/6	PE08206.d
Level	3	STD	480-49964/7	PE08207.d
Level	4	STD	480-49964/8	PE08208.d

Calibration Start Date: 02/01/2012 10:57

ANALYTE	CURVE	RESPONSE				CONCENTRATION (NG/UL)				
	TYPE	LVL 1	LVL 2	LVL 3	LVL 4	LVI, 1	LVL 2	LVL 3	LVL 4	***********
2-Methoxyethanol	Ave	5634515	11934735	23830431	25685716	10.0	20.0	40.0	50.0	
2-Ethoxyethanol	Ave	7515699	15853713	31498762	34726285	10.0	20.0	40.0	50.0	
Propylene glycol	Ave	6179509	13435683	27309567	30075112	10.0	20.0	40.0	50.0	~~~~~
Ethylene glycol	Ave	4592495	9973849	20558557	22739168	10.0	20.0	40.0	50.0	PRINCIPAL STATE OF THE STATE OF
2,2'-Oxybisethanol	Ave	5481057	10774329	22412169	25045139	10.0	20.0	40.0	50.0	
Triethylene Glycol	Ave	3627055	6104360	13161638	15350365	10.0	20.0	40.0	50.0	
1,4-Butanediol	Ave	36530103	48856122	58023475	68266023	40.0	50.0	60.0	80.0	His document and the

Curve Type Legend: Ave = Average

Calibration ID: 5852

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/2 Calibration Date: 02/15/2012 09:45

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09183.d Conc. Units: ng/uL Heated Purge: (Y/N) N

TYPE	AVE CF	CF .	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D	
Ave	571860	651176	100 miles (100 miles (22.8	20.0	13.9	20.0	
Ave	760511	863288		22.7	20.0	13.5	,20.0	
Ave	643218	696106		21.6	20.0	8.2	20.0	
Ave	480568	498317	aur annann ar ann bandalaith fhaille agus agus ar agus an ar an	20.7	20.0	3.7	20.0	
Ave	540871	338384	TOTAL TOTAL CONTROL OF THE STATE OF THE STAT	12.5	20.0	-37.4*	72 Day 9	70
Ave	350934	79713	and their de telebrishedelichedeliche un anzuszuszuszuszuszuszuszuszuszuszuszuszusz	4.54	20.0	-77,3*/	20.0	
Ave	917742	887402	- (-13-4)- (-0-4)900000 (1-0)00000000000000000000000000000000000	48.3	50.0	-3.3	20.0	
	Ave Ave Ave Ave Ave Ave Ave Ave	Ave 571860 Ave 760511 Ave 643218 Ave 480568 Ave 540871 Ave 350934	Ave 571860 651176 Ave 760511 863288 Ave 643218 696106 Ave 480568 498317 Ave 540871 338384 Ave 350934 79713	TYPE . Ave 571860 651176 Ave 760511 863288 Ave 643218 696106 Ave 480568 498317 Ave 540871 338384 Ave 350934 79713	TYPE . AMOUNT Ave 571860 651176 22.8 Ave 760511 863288 22.7 Ave 643218 696106 21.6 Ave 480568 498317 20.7 Ave 540871 338384 12.5 Ave 350934 79713 4.54	TYPE . AMOUNT AMOUNT Ave 571860 651176 22.8 20.0 Ave 760511 863288 22.7 20.0 Ave 643218 696106 21.6 20.0 Ave 480568 498317 20.7 20.0 Ave 540871 338384 12.5 20.0 Ave 350934 79713 4.54 20.0	TYPE AMOUNT AMOUNT AMOUNT Ave 571860 651176 22.8 20.0 13.9 Ave 760511 863288 22.7 20.0 13.5 Ave 643218 696106 21.6 20.0 8.2 Ave 480568 498317 20.7 20.0 3.7 Ave 540871 338384 12.5 20.0 -37.4 Ave 350934 79713 4.54 20.0 -77.3	TYPE AMOUNT AMOUNT %D Ave 571860 651176 22.8 20.0 13.9 20.0 Ave 760511 863288 22.7 20.0 13.5 20.0 Ave 643218 696106 21.6 20.0 8.2 20.0 Ave 480568 498317 20.7 20.0 3.7 20.0 Ave 540871 338384 12.5 20.0 -37.4 20.6 Ave 350934 79713 4.54 20.0 -77.3* 20.0

NTC = Nontinget earpoint

FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480~16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/2 Calibration Date: 02/15/2012 09:45

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09183.d Heated Purge: (Y/N) N

7.00 luko	RT	RT WINDOW		
Analyte	Kı	TO	FROM	
2-Methoxyethanol	1.92	1.87	1.97	
2-Ethoxyethanol	2.07	2.02	2.12	
Propylene glycol	4.52	4.47	4.57	
Ethylene glycol	4.78	4.73	4.83	
2,2'-Oxybisethanol	7.18	7.13	7.23	
Triethylene Glycol	8.84	8.79	8.89	
1,4-Butanediol	6.83	6.78	6.88	

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/13 Calibration Date: 02/15/2012 13:18

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09194.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	6 60012		23.1	20.0	15.4	20.0
2-Ethoxyethanol	Ave	760511	875533	ORIGINAL PROPERTY OF THE PROPE	23.0	20.0	15.1	20.0
Propylene glycol	Ave	643218	729182	THE PROPERTY OF THE PROPERTY O	22.7	20.0	13.4	20.0
Ethylene glycol	Ave	480568	529022	MARKANAN (1986) - V. 418 LB LA BARLA (1999) 41. TOPO 1999	22.0	20.0	10.1	.20.0
2,2'-Oxybisethanol	Ave	540871	463944		17.2	20.0	-14.2	20.0
Triethylene Glycol	Ave	350934	162630	g (-m x -n -ng) - (-m m m m -n	9.27	20.0	-53.7*	20.0
1,4-Butanediol	Ave	917742	964817		52.6	50.0	5.1	20.0



FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/13 Calibration Date: 02/15/2012 13:18

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09194.d Heated Purge: (Y/N) N

ρπ	RT WINDOW		
R1	TO	FROM	
1.92	1.87	1.97	
2.08	2.03	2.13	
4.52	4.47	4.57	
4.77	4.72	4.82	
7.18	7.13	7.23	
8.84	8.79	8.89	
6.83	6.78	6.88	
	2.08 4.52 4.77 7.18 8.84	RT TO 1.92 1.87 2.08 2.03 4.52 4.47 4.77 4.72 7.18 7.13 8.84 8.79	

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/24 Calibration Date: 02/15/2012 16:28

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09205.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	654310		22.9	20.0	14.4	20.0
2-Ethoxyethanol	Ave	760511	869251		22.9	20.0	14.3	20.0
Propylene glycol	Ave	643218	727630	000000 00 00 00 00 00 00 00 00 00 00 00	22.6	20.0	13.1	20.0
Ethylene glycol	Ave	480568	538536		22.4	20.0	12.1	20.0
2,2'-Oxybisethanol	Ave	540871	439873	-	16.3	20.0	-18.7	20.0
Triethylene Glycol	Ave	350934	111995		6.38	20.0	-68.1±	20.0
1,4-Butanediol	Ave	917742	983190		53.6	50.0	7.1	20.0

FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/24 Calibration Date: 02/15/2012 16:28

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09205.d Heated Purge: (Y/N) N

, The alive of	RT	RT WINDOW		
Analyte	, NI	TO	FROM	
2-Methoxyethanol	1.91	1.86	1.96	
2-Ethoxyethanol	2.07	2.02	2.12	
Propylene glycol	4.52	4.47	4.57	
Ethylene glycol	4.78	4.73	4.83	
2,2'-Oxybisethanol	7.18	7.13	7.23	
Triethylene Glycol	8.83	8.78	8.88	
1,4-Butanediol	6.83	6.78	6.88	

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51671/27 Calibration Date: 02/15/2012 17:20

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09208.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol .	Ave	571860	665583		23.3	20.0	16.4	20.0
2-Ethoxyethanol	Ave	760511	884057	0-1-2-2-4-1-3-1-4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	23.2	20.0	16.2	20.0
Propylene glycol	Ave	643218	741537		23.1	20.0	15.3	20.0
Ethylene glycol	Ave	480568	545151	d	-22.7	20.0	13.4	20.0
2,2'-Oxybisethanol	Ave	540871	516044		19.1	20.0	-4.6	20.0
Triethylene Glycol	Ave	350934	243331	,	13.9	20.0	-30.7*	20.0
1,4-Butanediol	Ave	917742	962915	as taken a substant as the PP $H_{A \setminus \{i\}}$, $\{j\}$, $\{i\}$, $\{j\}$, $\{i\}$,	. 52.5	50.0	4.9	20.0

FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1
SDG No.:

Lab Sample ID: CCV 480-51671/27 Calibration Date: 02/15/2012 17:20

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09208.d Heated Purge: (Y/N) N

	RT	RT WINDOW		
Analyte	N1	TO	FROM	
2-Methoxyethanol	1.92	1.87	1.97	
2-Ethoxyethanol	2.08	2.03	2.13	
Propylene glycol	4.52	4.47	4.57	
Ethylene glycol	4.78	4.73	4.83	
2,2'-Oxybisethanol	7.18	7.13	7.23	
Triethylene Glycol	8.84	8.79	8.89	
1,4-Butanediol	6.84	6.79	6.89	

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51962/3 Calibration Date: 02/17/2012 08:17

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

ANALYTE	CURVE TYPE	AVE CF	CF	MINCF	CALC AMOUNT	SPIKE AMOUNT	% D	MAX %D
2-Methoxyethanol	Ave	571860	664669		23.2	20.0	16.2	20.0
2-Ethoxyethanol	Ave	760511	893385		23.5	20.0	17.5	20.0
Propylene glycol	Ave	643218	732179	······································	22.8	20.0	13.8	20.0
Ethylene glycol	Ave	480568	537733		22.4	20.0	11.9	20.0
2,2'-Oxybisethanol	Ave	540871	566183		20.9	20.0	4.7	20.0
Triethylene Glycol	Ave	350934	271488		15.5	20.0	-22.6*	20.0
1,4-Butanediol	Ave	917742	923292		50.3	50.0	0.6	20.0

Ne

FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

Lab Sample ID: CCV 480-51962/3 Calibration Date: 02/17/2012 08:17

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09224.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW		
Analyte		TO	FROM	
2-Methoxyethanol	1.91	1.86	1.96	
2-Ethoxyethanol	2.07	2.02	2.12	
Propylene glycol	4.51	4.46	4.56	
Ethylene glycol	4.77	4.72	4.82	
2,2'-Oxybisethanol	7.17	7.12	7.22	
Triethylene Glycol	8.83	8.78	8.88	
1,4-Butanediol	6.82	6.77	6.87	

SDG No.:

FORM VII GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51962/14 Calibration Date: 02/17/2012 12:18

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09235.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	666993		23.3	20.0	16.6	20.0
2-Ethoxyethanol	Ave	760511	894740		23.5	20.0	17.6	20.0
Propylene glycol	Ave	643218	746011	annananan mananan mananan maga 1974 di 1987 di 1834 da 1836 di	23.2	20.0	16.0	20.0
Ethylene glycol	Ave	480568	552710		23.0	20.0	15.0	20.0
2,2'-Oxybisethanol	Ave	540871	603813		22.3	20.0	11.6	20.0
Triethylene Glycol	Ave	350934	313129	and a last the short of the state of the sta	17.8	20.0	-10.8	20.0
1,4-Butanediol	Ave	917742	947260		51.6	50.0	3.2	20.0

FORM VII GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Lab Sample ID: CCV 480-51962/14 Calibration Date: 02/17/2012 12:18

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE09235.d Heated Purge: (Y/N) N

Analyta	ייים מי	RT WINDOW		
Analyte		TO	FROM	
2-Methoxyethanol	1.91	1.86	1.96	
2-Ethoxyethanol	2.07	2.02	2.12	
Propylene glycol	4.51	4.46	4.56	
Ethylene glycol	4.77	4.72	4.82	
2,2'-Oxybisethanol	7.17	7.12	7.22	
Triethylene Glycol	8.83	8.78	8.88	
1,4-Butanediol	6.82	6.77	6.87	

GC VOA ANALYSIS RUN LOG

Lab Name: 1	TestAmerica Buffalo	Job No.:	480-16100-1
SDG No.:			33.00
Instrument	ID: PE-01	Start Date	e: 02/01/2012 10:57
Analysis Bat	tch Number: 49964	End Date:	02/01/2012 19:02

LAB SAMPLE ID CLIENT SAMPLE ID .		DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID	
ZZZZZ		02/01/2012 10:57	1		ZB-5 0.25(mm)	
STD 480-49964/5 IC	errennen breden skrisk in AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	02/01/2012 11:15	1	PE08205.d	ZB-5 0.25(mm)	
STD 480-49964/6 IC		02/01/2012 11:32	1	PE08206.d	ZB-5 0.25(mm)	
STD 480-49964/7 IC		02/01/2012 11:49	1	PE08207.d	ZB-5 0.25(mm)	
STD 480-49964/8 IC		02/01/2012 12:06	1	PE08208.d	ZB-5 0.25(mm)	
ICV 480-49964/9		02/01/2012 12:24	1	manadadadadadadadadadadadadadadadadadada	ZB-5 0.25(mm)	
22222		02/01/2012 13:43	1		ZB-5 0.25(mm)	
ZZZZZ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	02/01/2012 14:11	1		_ZB-5 0.25(mm)	
ICV 480-49964/12		02/01/2012 14:48	1.	The state of the s	2B-5 0.25(mm)	
CCV 480-49964/13		02/01/2012 15:52	1	annananananananananananananananananana	ZB-5 0.25(mm)	
ZZZZZ		02/01/2012 16:09	1	and the state of t	ZB-5 0.25(mm)	
ZZZZZ		02/01/2012 16:26	1	1	. ZB-5 0.25(mm)	
22222		02/01/2012 16:44	1 1	CONTRACTOR OF THE PROPERTY OF	ZB-5 0.25(mm)	
22222		02/01/2012 17:01	1 1	AA DE LIANGE DE PERON CONTRACTOR DE LA C	ZB-5 0.25(mm)	
MDLV 480-49832/5-A	444.44.44.44.44.44.44.44.44.44.44.44.44	02/01/2012 17:18	1		ZB-5 0.25(mm)	
MDLV 480-49832/6-A		02/01/2012 17:36	1		ZB-5 0.25(mm)	
22222	MANAGEMENT OF THE PROPERTY OF	02/01/2012 17:53	50		ZB-5 0.25(mm)	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		02/01/2012 18:10	1		ZB-5 0.25(mm)	
CCV 480-49964/24		02/01/2012 19:02	1		2B-5 0.25(mm)	

8015B

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo	Job No.: 480-16100-1
SDG No.:	
Instrument ID: PE-01	Start Date: 02/15/2012 09:45
Analysis Batch Number: 51671	End Date: 02/15/2012 17:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 480-51671/2	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	02/15/2012 09:45	1	PE09183.d	ZB-5 0.25(mm)
MB 480-51622/1-A		02/15/2012 10:25	1	PE09184.d	ZB-5 0.25(mm)
LCS 480-51622/2-A		02/15/2012 10:42	1	PE09185.d	ZB-5 0.25(mm)
480-16100-1	FB12	02/15/2012 11:00	1	PE09186.d	ZB-5 0.25(mm)
480-16100-2	FB13	02/15/2012 11:17	1	PE09187.d	ZB-5 0.25(mm)
480-16100-3	FB14	02/15/2012 11:34	1	PE09188.d	ZB-5 0.25(mm)
480-16100-4	HW21	02/15/2012 11:52	1	PE09189.d	ZB-5 0.25(mm)
480-16100-5	HW21Z	02/15/2012 12:09	1	PE09190.d	ZB-5 0.25(mm)
480-16100-6	HW22	02/15/2012 12:26	1	PE09191.d	ZB-5 0.25(mm)
480-16100-7	HW22-P	02/15/2012 12:43	1	PE09192.d	ZB-5 0.25(mm)
480-16100-8	HW23	02/15/2012 13:01	1	PE09193.d	ZB-5 0.25(mm)
CCV 480-51671/13		02/15/2012 13:18	1	PE09194.d	ZB-5 0.25(mm)
480-16100-9	HW23-P	.02/15/2012 13:35	1	PE09195.d	ZB-5 0.25(mm)
480-16100-10	HW38	02/15/2012 13:53	1	PE09196.d	ZB-5 0.25(mm)
480-16100-11	HW38-P	02/15/2012 14:10	1	PE09197.d	ZB-5 0.25(mm)
480-16100-12	HW 4 4	02/15/2012 14:27	1	PE09198.d	ZB-5 0.25(mm)
480-16100-12 MS	HW44 MS	02/15/2012 14:45	1	PE09199.d	ZB-5 0.25(mm)
480-16100-12 MSD	HW44 MSD	02/15/2012 15:02	1	PE09200.d	ZB-5 0.25(mm)
480-16100-13	HW47	02/15/2012 15:19	1	PE09201.d	ZB-5 0.25(mm)
480-16100-14	HW47-P	02/15/2012 15:36	1	PE09202.d	ZB-5 0.25(mm)
480-16100-15	HW48	02/15/2012 15:54	1	PE09203.d	ZB-5 0.25(mm)
480-16100-16	HW48Z	02/15/2012 16:11	1	PE09204.d	ZB-5 0.25(mm)
CCV 480-51671/24		02/15/2012 16:28	1	PE09205.d	ZB-5 0.25(mm)
480-16100-17	HW49	02/15/2012 16:46	1	PE09206.d	ZB-5 0.25(mm)
480-16100-18	HW49-P	02/15/2012 17:03	1	PE09207.d	ZB-5 0.25(mm)
CCV 480-51671/27		02/15/2012 17:20	1	PE09208.d	ZB-5 0.25(mm)

8015B

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

Instrument ID: PE-01 Start Date: 02/17/2012 08:17

Analysis Batch Number: 51962 End Date: 02/17/2012 20:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION	LAB FILE ID	COLUMN ID
CCV 480-51962/3		02/17/2012 08:17	1	PE09224.d	ZB-5 0.25(mm)
MB 480-51944/1-A		02/17/2012 08:57	1	PE09225.d	ZB-5 0.25(mm)
LCS 480-51944/2-A		02/17/2012 09:14	1	PE09226.d	ZB-5 0.25(mm)
480-16100-19	HW51	02/17/2012 09:59	1	PE09227.d	ZB-5 0.25(mm)
480-16100-20	HW51-P	02/17/2012 10:17	1	PE09228.d	ZB-5 0.25(mm)
22222		02/17/2012 10:34	1		ZB-5 0.25(mm)
ZZZZZ	M. M	02/17/2012 10:51	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 11:09	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 11:26	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 11:43	1		ZB-5 0.25(mm)
22222		02/17/2012 12:01	1		2B-5 0.25(mm)
CCV 480-51962/14	***	02/17/2012 12:18	1	PE09235.d	2B-5 0.25(mm)
ZZZZZ		02/17/2012 12:35	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 12:53	1	ND/947/11/11/11/11/11/11/11/11/11/11/11/11/11	ZB-5 0.25(mm)
22222		02/17/2012 13:10	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 13:27	1	**************************************	Z8-5 0.25(mm)
22222		02/17/2012 13:45	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 14:02	1		Z8-5 0.25 (mm)
ZZZZZ		02/17/2012 14:19	1		ZB-5 0.25(mm)
22222	A. J. 14 (14) A. J. 14 (14) A. J. 14 (14) A. J. 15 (14) A.	02/17/2012 14:37	1		ZB-5 0.25 (mm)
CCV 480-51962/23		02/17/2012 14:54	1	The state of the s	2B-5 0.25(mm)
ZZZZZ		02/17/2012 15:11	1	, , , , , , , , , , , , , , , , , , ,	ZB-5 0.25(mm)
ZZZZZ	Service Control of the Control of th	02/17/2012 15:29	1	I	ZB-5 0.25(mm)
ZZZZZ		02/17/2012 15:46	1	a	ZB-5 0.25(mm)
ZZZZZ	44_444444444444444444444444444444444444	02/17/2012 16:03	1	annanana tanananananananan arananan arananan annananan aran aran 1999 (19) (19) (19)	ZB-5 0.25(mm)
Z2222		02/17/2012 16:20	1		Z8-5 0.25(mm)
ZZZZZ		02/17/2012 16:38	1		ZB-5 0.25(mm)
22222		02/17/2012 16:55	1	AND THE PROPERTY OF THE PROPER	ZB-5 0.25 (mm)
ZZZZZ		02/17/2012 17:12	1		ZB-5 0.25(mm)
ZZZZZ		02/17/2012 17:30	1		2B-5 0.25(mm)
ZZZZZ		02/17/2012 17:47	1	MANAGAMAN WASHINGTON (4 - Mary 14 0 60 140 1 0 1 484 7 1 0 (641 AMMERICAN PRINCES	2B-5 0.25(mm)
CCV 480-51962/34		02/17/2012 18:04	1		ZB-5 0.25 (mm)
22222		02/17/2012 18:21	1	PROPERTY OF A PR	ZB-5 0.25(mm)
ZZZZZ	\$200.00 (10.00 (02/17/2012 18:39	1		28-5 0.25(mm)
12222		02/17/2012 18:56	1	AMERICAN A ATTACK OF THE PARTY	28-5 0.25(mm)
22222		02/17/2012 19:13	1	~^(ZB-5 0.25(mm)
22222	4-4-1	02/17/2012 19:31	1	41	ZB-5 0.25(mm)
ZZZZZ		02/17/2012 19:48	1		ZB-5 0.25 (mm)
32222	1.00	02/17/2012 20:05	1		ZB-5 0.25(mm)
CCV 480-51962/42		02/17/2012 20:23	1		2B-5 0.25(mm)

8015B

SDG No.:

FORM II GC VOA SURROGATE RECOVERY

Lab	Name	: TestAmerica Buffalo	Job	No.:	480-16100-1
SDG	No.:	AND STREET OF THE STREET OF TH			
Matr	ix:	Water	Leve		ow

ID: 0.25 (mm)

Client Sample ID Lab Sample ID 14BD1 # FB12 480-16100-1 108 FB13 480-16100-2 104 480-16100-3 FB14 111 HW21 480-16100-4 100 HW212 480-16100-5 113 HW22 480-16100-6 103 HW22-P 480-16100-7 108 HW23 480-16100-8 102 HW23-P 480-16100-9 110 HW38 480-16100-10 HW38-P 480-16100-11 108 HW44 480-16100-12 103 109 HW47 480-16100-13 HW47-P 480-16100-14 106 HW48 480-16100-15 110 480-16100-16 105 HW482 106 HW49 480-16100-17 106 HW49-P 480-16100-18 HW51 480-16100-19 HW51-P 480-16100-20 109 MB 480-51622/1-A 107 MB 480-51944/1-A 100 LCS 110 480-51622/2-A LCS 480-51944/2-A HW44 MS 480-16100-12 MS 111 480-16100-12 MSD HW44 MSD 109

GC Column (1): ZB-5

14BD = 1,4-Butanediol

QC LIMITS 66-130

Column to be used to flag recovery values

FORM II 8015B

Lab	Name	:	Te:

estAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Batch Number: 51622

Batch Start Date: 02/15/12 07:17

Batch Analyst: Neary, Mary Ann

Batch Method: 8015 Prep

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	Final Am ount	GLY_CCV_1000 00014	GLY_SURR1000 00016		
MB 480-51622/1		8015 Prep, 8015B		0.5 mL	1 mL		50 uL		
LCS 480-51622/2		8015 Prep, 8015B		0.5 mL	1 mL	10 uL	50 uL :	4	
480-16100-A-1	FB12	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL	90-904 to bloke en	
480-16100-A-2	FB13	8015 Prep, 8015B	Т	0.5 mL	l mL		50; uL		
480-16100-A-3	FB14	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		, , , , , , , , , , , , , , , , , , , ,
480-16100-A-4	HW21	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		
480-16100-B-5	HW21Z	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		
480-16100-B-6	HW22	8015 Prep, 80158	Т	0.5 mL	1 mL		50 uL		
480-16100-B-7	HW22-P	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		,
480-16100-A-8	HW23	8015 Prep, 8015B	Т	0.5 mL	· 1 mL	:	50 uL	:	
480-16100-A-9	HW23-P	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		
480-16100-B-10	HW38	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-16100-B-11	HW38-P	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		
480-16100-B-12	HW44	8015 Prep, 8015B	Т	0.5 mL	1 mL	:	50 uL		
480-16100-A-12 MS	HW44	8015 Prep, 8015B	Т	0.5 mL	1 mL	10 uL	50 uL		
480-16100-A-12 MSD	HW4 4	8015 Prep, 8015B	Т	0.5 mL	· 1 mL	10 uL	50 uL		
480-16100-A-13	HW47	8015 Prep, 8015B	Т	0:5 mL	1 mL	TATE OF THE PARTY	50 uL		
480-16100-A-14	HW47-P	8015 Prep, 8015B	T	0.5 mL	· 1 mL	-	50 uL	ALL AND	
480-16100-B-15	HW48	8015 Prep, 8015B	Т	0.5 mL	. 1 mL		50 uL		
480-16100-A-16	HW48Z	8015 Prep, 8015B	Т	0.5 mL	1 mL		50 uL		
480-16100-B-17	HW49	8015 Prep, 8015B	Т	0.5 mL	l mL		50 UL		
480-16100-B-18	HW49-P	8015 Prep, 8015B	Т	0.5 mL	1 mL	44.00	50 uL		

8015B

Page 1 of 2

GC VOA BATCH WORKSHEET

	estAmerica Buffalo	Job No.: 480-16100	0-1	ownto	
SDG No.:			Americking agencies 24		
Batch Number	: 51622	Batch Start Date:		Batch Analyst:	Neary, Mary Ann
Batch Method		Batch End Date:		nora.	
	- Ba	atch Notes			1.
Methanol Lot No	umber	de997			

Basis	Basis Description	
T	Total/NA	

DIM0272101

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo			J	Job No.: 480-1610					
SDG No.:				THE STATE OF THE S					gar ga to the transfer of the transfer of the definition and the transfer of t
Batch Number:	51944		-	atch Start Date:		06:50	Batch Analyst:	Neary, Mary	Ann
Batch Method:		117 - 47 - 4 - 477		Batch End Date:		Privile for elibit to mail tradelilation and assessment assessment and the Privile Pri			
Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GLY_CCV_1000 00014	GLY_SURR1000 00016		
MB 480-51944/1		8015 Prep, 8015B		.5 mL	1 mL		50 uL	((Б. Б. А. А. В. М. 1914) городина и предествення по предоставлення по в поставлення по в подоставлення по по в подоставлення по	
LCS 480-51944/2		8015 Prep, 8015B		.5 mL	1 mL	10 uL	50 uL		
480-16100-A-19	HW51	8015 Prep, 8015B	Т	.5 mL	1 mL		50 uL		
480-16100-A-20	HW51-P	8015 Prep,	T	.5 mL	1 mL	от на на на во водината на	50 uL		3 (A)

Batch	Notes	.7-					
Methanol Lot Number	de 997						

Basis	Basis Description	Annual and a
T	Total/NA	

02/21/2012

FORM IV GC VOA METHOD BLÄNK SUMMARY

	ica Buffalo	Job No.: 480-163	100-1
SDG No.:		**************************************	
Lab Sample ID: MB	480-51622/1-A		
Matrix: Water		Date Extracted:	02/15/2012 07:17
Lab File ID:(1) PE	09184.d	Lab File ID:(2)	ANNUAL SEP 23 (8) 1/1/37 PERMITTERINA PERMIT
Date Analyzed: (1)	02/15/2012 10:25	Date Analyzed: (2	N
Instrument ID:(1)	PE-01	Instrument ID: (2	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
GC Column: (1) ZB-5	ID: 0.25(mm)	GC Column: (2)	ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	- 1 · 1	DATE	DATE	
CLIENT SAMPLE ID	LAB SAMPLE ID	ANALYZED 1	ANALYZED 2	
	LCS 480-51622/2-A	02/15/2012 10:42		
FB12	480-16100-1	02/15/2012 11:00		
FB13	480-16100-2	02/15/2012 11:17	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON OF THE PE	
FB14	480-16100-3	02/15/2012 11:34		
HW21	480-16100-4	02/15/2012 11:52	The second secon	
HW21Z	480-16100-5	02/15/2012 12:09	umanana kananana kananana kananananananana	
HW22	480-16100-6	02/15/2012 12:26		
HW22-P	480-16100-7	02/15/2012 12:43	00000000000000000000000000000000000000	
HW23	480-16100-8	02/15/2012 13:01		
HW23-P	480-16100-9	02/15/2012 13:35		
НW38	480-16100-10	02/15/2012 13:53	vaaaa. ₹60 -) v-4 v/-) 0 =0.000000000000000000000000000000000	
HW38-P	480-16100-11	02/15/2012 14:10		
HW44	480-16100-12	02/15/2012 14:27	 	
HW44 MS	480-16100-12 MS	02/15/2012 14:45		
HW44 MSD	480-16100-12 MSD	02/15/2012 15:02	y y y y y y y - y - y - h (h) - h - h - h - h - h - h - h - h - h -	
HW47	480-16100-13	02/15/2012 15:19		
HW47-P	480-16100-14	02/15/2012 15:36		
HW48	480-16100-15	02/15/2012 15:54	ppdpgdardardardardardardardardardardardardard	
HW48Z	480-16100-16	02/15/2012 16:11	: :	
HW49	480-16100-17	02/15/2012 16:46		
HW49-P	480-16100-18	02/15/2012 17:03	4	

FORM IV 8015B

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1								
SDG No.:								
Client Samp	le ID:	Lab Sample II	: MB 480)-51622/1-A	17-W-177 (7770) 17-0 (17-0)			
Matrix: Wat	er	Lab File ID:	PE09184.	d				
Analysis Me	thod: 8015B	Date Collecte	d:	90.7.1 0.000				
Sample wt/vo	ol: 0.5(mL)	Date Analyzed	02/15/	2012 10:25				
Soil Aliquot	t Vol:	Dilution Factor: 1						
Soil Extract	t Vol.:	GC Column: ZB-5 ID: 0.25(mm)						
% Moisture:	•	Level: (low/med) Low						
Analysis Bat	sch No.: 51671	Units: mg/L			gang and the special policy of the last of the section of the special policy of the section of the special policy of the section of the section of the special policy of the section of th			
CAS NO.	COMPOUND NAME	RESULT	Ω	RL	MDL			
107-21-1	Ethylene glycol	0.82	0 J	10	0.76			
CAS NO.	SURROGATE		%RE	ic Q	LIMITS			
110-63-4	1.4-Butanediol			107	66-130			

FORM III GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name	: TestAmerica Buffa	lo		b No.: 480	-16100-1		\$\$qqq==\$\qqqq\\$qqq\qq	
SDG No.:		a a tha ann an a	Levaples III. hidomake	iddia j. j	pela command IIIII III III III III III III III III			
Matrix:		Level:			PE09185.d			
Lab ID:	LCS 480-51622/2-A		C	ient ID:		6	antikolikusa dan salah 1984 kilaban kilikusa kelasa kelasa kensa kensa san salah	
		-						-

	SPIKE	LCS	LCS	QC	
4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ADDED	CONCENTRATION	8	LIMITS	#
COMPOUND	(mg/L)	(mg/L)	REC	REC	
Ethylene glycol	20.0	19.2	96	62-148	

 $\mbox{\#}$ Column to be used to flag recovery and RPD values FORM III $\mbox{8015B}$

02/21/2012

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name:	restAmerica Buffalo	Job No.: 480-16100-1						
SDG No.:								
Client Samp	le ID:	Lab Sample ID: LCS 480-51622/2-A						
Matrix: Wat	er	Lab File ID: PE09185.d						
Analysis Me	thod: 8015B	Date Collected:						
Sample wt/vo	ol: 0.5(mL)	Date Analyzed: 02/15/2012 10:42						
Soil Aliquo	t Vol:	Dilution Factor: 1						
Soil Extract	t Vol.:	GC Column: 2B-5 ID: 0.25(mm)						
% Moisture:		Level: (low/med) Low						
Analysis Bat	tch No.: 51671	Units: mg/L						
CAS NO.	COMPOUND NAME	RESULT Q RL MDL						
107-21-1	Ethylene glycol	19.2 10 0.76						
CAS NO.	SURROGATE	%REC Q LIMITS						
110-63-4	1,4-Butanediol	110 66-130						

FORM III GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: PE09199.d

Lab ID: 480-16100-12 MS Client ID: HW44 MS

1							
		SPIKE	SAMPLE	MS	MS	QC	
		ADDED	CONCENTRATION	CONCENTRATION	8	LIMITS	#
	COMPOUND	(mg/L)	(mg/L)	(mg/L)	REC	REC	2
	Ethylene glycol	20.0	ND	20.0	100	50-150	

Column to be used to flag recovery and RPD values FORM III 8015B

02/21/2012

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Te	estAmerica Buffalo	Job No.: 480-16100-1					
SDG No.:		makan sinatan asa makakalan kisik minik da inggan pangan da 111 ji mangan kisik sa					
Client Sample	e ID: HW44 MS	Lab Sample ID:					
Matrix: Wate	r	Lab File ID: P	E09199.d				
Analysis Meth	hod: 8015B	Date Collected:	02/09/2	012 14:49			
Sample wt/vol: 0.5(mL)		Date Analyzed:	02/15/20:	12 14:45			
Soil Aliquot Vol:		Dilution Factor: 1					
Soil Extract Vol.:		GC Column: ZB-5 ID: 0.25(mm)					
% Moisture:		Level: (low/med) Low					
Analysis Bato	ch No.: 51671	Units: mg/L					
CAS NO.	COMPOUND NAME	RESULT	Q	RL	* MDL		
107-21-1	Ethylene glycol	20.0		10	0.76		
CAS NO.	SURROGATE		%REC	Q	LIMITS		

110-63-4

1,4-Butanediol

66-130

FORM III GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

SDG No.:

Matrix: Water

Level: Low

Lab File ID: PE09200.d

Client ID: HW44 MSD

SPIKE

MSD

MSD

QC LIMITS

	SPIKE	MSD	MSD		QC L:	IMITS	
Your A	ADDED	CONCENTRATION	ક	8		***************************************	#
COMPOUND	(mg/L)	(mg/L)	REC	RPD	RPD	REC	
Ethylene glycol	20.0	22.8	114	13	50	50-150	

Column to be used to flag recovery and RPD values FORM III 8015B

02/21/2012

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: 3	PestAmerica Buffalo	Job No.: 480-16100-1						
SDG No.:								
Client Samp	le ID: HW44 MSD	Lab S	Sample ID:	480-1610	00-12 MSD			
Matrix: Wat	er	Lab F	File ID: PH	E09200.d				
Analysis Met	hod: 8015B	Date	Collected:	02/09/2	2012 14:4	9		
Sample wt/vol: 0.5(mL)		Date	Analyzed:	02/15/20	15:02			
Soil Aliquot Vol:		Dilution Factor: 1						
Soil Extract	Soil Extract Vol.:		GC Column: ZB-5 ID: 0.25(mm)					
% Moisture:		Level: (low/med) Low						
Analysis Bat	ch No.: 51671	Units: mg/L						
***************************************	2000 pt. 1,186 1,180 1,000 (100 100 100 100 100 100 100 100 100							
CAS NO.	COMPOUND NAME		RESULT	Q	RL	MDL		
107-21-1	Ethylene glycol		22.8		10	0.76		
CAS NO.	SURROGATE	su-na b		%REC	Q	LIMITS		

110-63-4

1,4-Butanediol

66-130

FORM IV GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmer	rica Buffalo	Job No.: 480-16100-1				
SDG No.:						
Lab Sample ID: MB						
Matrix: Water	· · · · · · · · · · · · · · · · · · ·	Date Extracted: 02/17/20	12 06:50			
Lab File ID:(1) P	E09225.d	Lab File ID:(2)				
Date Analyzed:(1)	02/17/2012 08:57	Date Analyzed:(2)				
Instrument ID:(1)	PE-01	Instrument ID: (2)				
GC Column: (1) ZB-5	5 ID: 0.25(mm)	GC Column: (2)	ID:			

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2	
	LCS 480-51944/2-A	02/17/2012 09:14		
HW51	480-16100-19	02/17/2012 09:59		
HW51-P	480-16100-20	02/17/2012 10:17		

FORM IV 8015B

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: T	estAmerica Buffalo	Job No.: 480-16100-1						
SDG No.:			::					
Client Sampl	le ID:	Lab Sample ID: MB 480-51944/1-A						
Matrix: Wat	er	Lab File ID:						
Analysis Met	thod: 8015B	Date Collecte	Date Collected:					
Sample wt/vo	ol: .5(mL)	Date Analyzed: 02/17/2012 08:57						
Soil Aliquot	vol:	Dilution Factor: 1						
Soil Extract	Vol.:	GC Column: ZB-5 ID: 0.25(mm)						
% Moisture:		Level: (low/med) Low						
Analysis Batch No.: 51962		Units: mg/L						
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL			
107-21-1	Ethylene glycol	1	ID		. 0.76			
CAS NO.	SURROGATE		%RE	C Q	LIMITS			
110-63-4	1.4-Butanediol	WANTER AND THE PROPERTY OF THE	that it was to the state of the	100	66-130			

FORM III GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name	: TestAmerica Buffa			Job No.: 480	0-16100-1			
SDG No.:								
Matrix:	Water	Level: Lo		Lab File ID:	PE09226.d			
Lab ID:	LCS 480-51944/2-A	e nanasaru manarus (uhhlash) uhormaranaruslusar rasus (b)ku (s) n (-	Client ID:		and the advantage of the first and an analysis and the first and the first and the first first first and an analysis and an analysis and the first and the f			
	COMPOUND		SPIKE ADDED (mg/L)		LCS NTRATION	LCS % REC	QC LIMITS REC	

20.0

19.2

62-148

Column to be used to flag recovery and RPD values FORM III $8015B_{\odot}$

02/21/2012

Ethylene glycol

FORM I GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name:	TestAmerica Buffalo	Job No.: 480-16100-1					
SDG No.:		ingga-maganasidi ngga salah mari ya maki saga makininga kangan ingga basa ka sa ingga saga na sa ingga saga na					
Client Samp	le ID:	Lab Sample ID: LCS 480-51944/2-A					
Matrix: Wat	er	Lab File ID: PE09226.d					
Analysis Me	thod: 8015B	Date Collected:					
Sample wt/v	ol: .5(mĹ)	Date Analyzed: 02/17/2012 09:14					
Soil Aliquo	t Vol:	Dilution Factor: 1					
Soil Extrac	t Vol.:	GC Column: ZB-5 ID: 0.25(mm)					
% Moisture:	ÿ	Level: (low/med) Low					
Analysis Batch No.: 51962		Units: mg/L					
CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL		
107-21-1	Ethylene glycol	19.2		10	0.76		
CAS NO.	SURROGATE	ommonomonomonomonomonomonomonomonomonom	%REC	Q	LIMITS		
110-63-4	1.4-Butanediol		10	01	66-130		